

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

~~1~~ (Cancelled)

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2. (Currently Amended) A sample tube assembly ~~incorporating a fluid tight label chamber wherein the tube assembly comprises~~ comprising:

- (i) a tube portion, ~~the~~ having a bottom of which is adapted to accept an end cap; and
- (ii) an end cap ~~adapted to be joined to~~ mountable to the bottom of the tube portion to provide a fluid tight-seal therewith; and
- (iii) a label chamber ~~provided in use~~ defined by a space between ~~the bottom or outer surface of the bottom of the tube portion and the inner surface of the end cap; and wherein, the end cap is fused, welded or otherwise joined to the bottom of the tube portion to provide a fluid tight-seal; and~~
- (iv) a label having optically readable code located inside the label chamber, a region of the end cap over the label being sufficiently transparent for the optically readable code to be read through the end cap.
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3. (Currently Amended) A sample tube assembly as claimed in Claim 2 wherein the tube portion comprises a shoulder formed around the bottom of the tube portion, and the end cap comprises a base and an upstanding sidewall extending substantially around the perimeter of the end cap, the sidewall

having an outermost end edge ~~of the sidewall being~~ adapted to cooperate with a the shoulder ~~formed~~ around the bottom of the tube portion.

4. (Currently Amended) A sample tube assembly as claimed in Claim 2 3 wherein prior to assembly, the sidewall of the end cap incorporates a first ridge extending substantially around the circumference of the sidewall ~~of the end cap~~.

5. (Currently Amended) A sample tube assembly as claimed in Claim 2 4 wherein prior to assembly a the shoulder on the bottom of the tube portion ~~also~~ incorporates a second ridge extending substantially around the circumference of the tube portion.

6. (Currently Amended) A sample tube assembly as claimed in Claim 2 5 wherein a the first ridge on the end cap and a the second ridge on the tube portion contact each other when the end cap is placed onto the ~~end~~ bottom of the tube portion.

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7. (Currently Amended) A sample tube assembly as claimed in Claim 2 6 wherein during the assembly manufacturing process, ~~material in two~~ the contacting first and second ridges ~~is~~ are heated and compressed together to form a ~~fluid-tight~~ fluid-tight seal between the tube portion and the end cap.

8. (Currently Amended) A sample tube assembly as claimed in Claim 2 wherein ~~a shoulder on the end cap includes a ridge and~~ the tube portion ~~incorporates~~ includes a groove ~~or depression~~ adapted to co-operatively engage with a ~~corresponding the ridge on the end edge of the end cap sidewall.~~

9. (Currently Amended) A sample tube assembly as claimed in Claim 2 wherein ~~a shoulder on the end cap includes a groove and~~ the tube portion ~~incorporates~~ includes a ridge adapted to co-operatively engage with a ~~corresponding the groove or channel on the end edge of the end cap sidewall.~~

10. (Currently Amended) A sample tube assembly as claimed in Claim 2 8 wherein the ridge of the end cap is a snap fit fits with the ~~bottom~~ groove of the tube portion.

11. (Currently Amended) A sample tube assembly as claimed in Claim 2 9 wherein the ~~assembly further comprises a label~~ groove of the end cap snap fits with the ridge of the tube portion.

12. (Currently Amended) A sample tube assembly as claimed in Claim 2 wherein the ~~assembly further comprises~~ label is a laser etched label.

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13. (Currently Amended) A sample tube assembly as claimed in Claim 2 wherein the ~~assembly further comprises a label which~~ is formed from paper.

14. (Currently Amended) A sample tube assembly as claimed in Claim 2 wherein the ~~assembly further comprises a label which~~ is formed from a plastics material.

15. (Currently Amended) A sample tube assembly as claimed in Claim 2 wherein the ~~assembly further comprises a label and wherein the label incorporates~~ optically readable code includes a bar code.

16. (Currently Amended) A sample tube assembly as claimed in Claim 2 wherein the ~~assembly further comprises a label and wherein the label incorporates~~ the optically readable code includes a binary code.

17. (Currently Amended) A sample tube assembly as claimed in Claim 2 wherein the ~~assembly further comprises a label and wherein the label incorporates~~ the optically readable code includes an alphanumeric code ~~together with either~~ and at least one of a bar code ~~or~~ and a binary code.

18. (Currently Amended) A sample tube assembly as claimed in Claim 2 wherein the end cap is fused to the tube portion using ~~ultrasound~~ ultrasonic welding.

19. (Currently Amended) A sample tube assembly according to Claim 2 wherein ~~a region in the end cap over the label is substantially transparent to visible light~~ the optically readable code includes at least one of optically readable shapes and optically readable characters.

20-24. (Cancelled)

25. (Currently Amended) A method of constructing a sample tube assembly comprising ~~the steps of~~:

- (i) forming a tube portion having a bottom;
- (ii) forming an end cap ~~for the closed end of the tube~~;
- (iii) placing a label having optically readable code in the end cap, the optically readable code being readable through a substantially transparent region of the end cap;
- (iv) placing the end cap onto the bottom of the tube portion and forming a ~~fluid-tight~~ fluid-tight seal between the two components such that the label becomes encapsulated in a fluid tight chamber.

26. (Currently Amended) A method of constructing the sample tube assembly as claimed in Claim 25 wherein the ~~two components~~ tube portion and the end cap are fused together using ultrasonic welding to define the fluid-tight seal.

27. (Currently Amended) A method of constructing the sample tube assembly comprising ~~the steps of~~:

- (i) encapsulating a label having optically readable shapes or characters or other code in a fluid-tight label chamber;
- (ii) attaching said label chamber to a tube.

28. (Cancelled)

29. (New) A sample tube assembly as claimed in Claim 7 wherein the label is a printed label.

30. (New) A sample tube assembly as claimed in Claim 8 wherein the groove is an endless groove extending substantially about the circumference of the tube portion.

31. (New) A sample tube assembly as claimed in Claim 8 wherein the groove is an endless groove extending substantially about the circumference of the end cap.

32. (New) A sample tube assembly as claimed in Claim 2 wherein the end cap has a snap fit with the bottom of the tube portion.

AB 33. (New) A sample tube assembly as claimed in Claim 2 wherein the bottom of the tube portion includes a reduced diameter end region that snap fits with the end cap.

34. (New) A sample tube assembly as claimed in Claim 2 wherein the label chamber overlies the bottom of the tube portion.